

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A carbon nanocapsule thin film, prepared by electroplating a plurality of carbon nanocapsules onto a substrate, wherein the carbon nanocapsules comprise a functional group and the functional group carries at least one charge after dissociation.

2. (Currently Amended) The carbon nanocapsule thin film as claimed in claim 1, wherein the carbon nanocapsule is a polyhedral carbon cluster constituted by having concentric multi-layers of a closed graphitic sheet structure. ~~The structure, and the~~ diameter of ~~a carbon~~ the carbon nanocapsule is about 3-100 nm.

3. (Original) The carbon nanocapsule thin film as claimed in claim 1, wherein the carbon nanocapsule is hollow.

4. (Original) The carbon nanocapsule thin film as claimed in claim 1, wherein the carbon nanocapsule is a metal-filled carbon nanocapsule filled with metals, metal oxides, metal carbides, or alloys.

5. (Original) The carbon nanocapsule thin film as claimed in claim 1, wherein the thickness of the carbon nanocapsule thin film is 20nm-1mm.

6. (Original) The carbon nanocapsule thin film as claimed in claim 1, wherein a redox agent or an external electric field is applied to offer a driving force for electroplating.

7. (Original) The carbon nanocapsule thin film as claimed in claim 6, wherein the potential of the external electric field is 0.01V-6V.

8. (Cancelled)

9. (Currently Amended) The carbon nanocapsule thin film as claimed in claim 8, wherein the ~~functional group carries at least one positive charge after dissociation of the~~ functional group is positive.

10. (Original) The carbon nanocapsule thin film as claimed in claim 9, wherein the functional group is amine or quaternary ammonium.

11. (Currently Amended) The carbon nanocapsule thin film as claimed in claim 8, wherein the ~~functional group carries at least one negative charge after dissociation of the~~ functional group is negative.

12. (Original) The carbon nanocapsule thin film as claimed in claim 11, wherein the functional group is carboxyl group, SO_4^- or PO_4^- .

13. (Original) The carbon nanocapsule thin film as claimed in claim 1, wherein the carbon nanocapsules is 20-100 vol%.

14. (Currently Amended) A carbon nanocapsule thin film preparation method, comprising:

providing a substrate; and

electroplating a plurality of carbon nanocapsules onto the substrate, wherein the carbon nanocapsules comprise a functional group and the functional group carries at least one charge after dissociation.

15. (Original) The carbon nanocapsule thin film preparation method as claimed in claim 14, wherein the carbon nanocapsule is a polyhedral carbon cluster constituting multiple graphite layers having a balls-within-a ball structure, and the diameter of a carbon nanocapsule is 3-100 nm.

16. (Original) The carbon nanocapsule thin film preparation method as claimed in claim 14, wherein the carbon nanocapsule is hollow.

17. (Original) The carbon nanocapsule thin film preparation method as claimed in claim 14, wherein the carbon nanocapsule is a metal-filled carbon nanocapsule filled with metals, metal oxides, metal carbides, or alloys.

18. (Original) The carbon nanocapsule thin film preparation method as claimed in claim 14, wherein the thickness of the carbon nanocapsule thin film is 20nm-1mm.

19. (Original) The carbon nanocapsule thin film preparation method as claimed in claim 14, wherein a redox agent or an external electric field is applied to offer a driving force for electroplating.

20. (Original) The carbon nanocapsule thin film preparation method as claimed in claim 19, wherein the potential of the external electric field is 0.01V-6V.

21. (Cancelled)

22. (Currently Amended) The carbon nanocapsule thin film preparation method as claimed in ~~claim 21~~claim 14, wherein the ~~functional group carries at least one positive charge after dissociation~~ of the functional group is positive.

23. (Original) The carbon nanocapsule thin film preparation method as claimed in claim 22, wherein the functional group is amine or quaternary ammonium group.

24. (Currently Amended) The carbon nanocapsule thin film preparation method as claimed in ~~claim 21~~claim 14, wherein the ~~functional group carries at least one negative charge after dissociation~~ of the functional group is negative.

25. (Original) The carbon nanocapsule thin film preparation method as claimed in claim 24, wherein the functional group is carboxyl group, SO₄⁻ or PO₄⁻.

26. (Original) The carbon nanocapsule thin film preparation method as claimed in claim 14, wherein the carbon nanocapsules is 20-100 vol%.